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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,970	12/20/2001	Karl Hansen	24,954-25	9112

7590 12/18/2006
JOHN F. KLOS
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MINNEAPOLIS, MN 55402

EXAMINER

AMIRI, NAHID

ART UNIT	PAPER NUMBER
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3679

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/033,970

Applicant(s)

HANSEN, KARL

Examiner

Nahid Amiri

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,10,11,13,14 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,10,11,13,14, and 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

RCE

This office action is in response to the amendment/request for continued examination (RCE) dated 10/02/2006. The application is not in condition for allowance in view of the new grounds of rejection set forth below. Claims 2, 5, 7-9, 12, 15-19 are canceled. Claims 20-24 are withdrawn. Claims 1, 3, 4, 6, 10, 11, 13, 14, 20-31 are pending.

Drawings

The drawings are objected to because **numerous reference numerals have been used to identify all variations of the same name part. As but one example, a planar element "12" is different variation in all of Figs. 1, 2, and 14-20.** Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

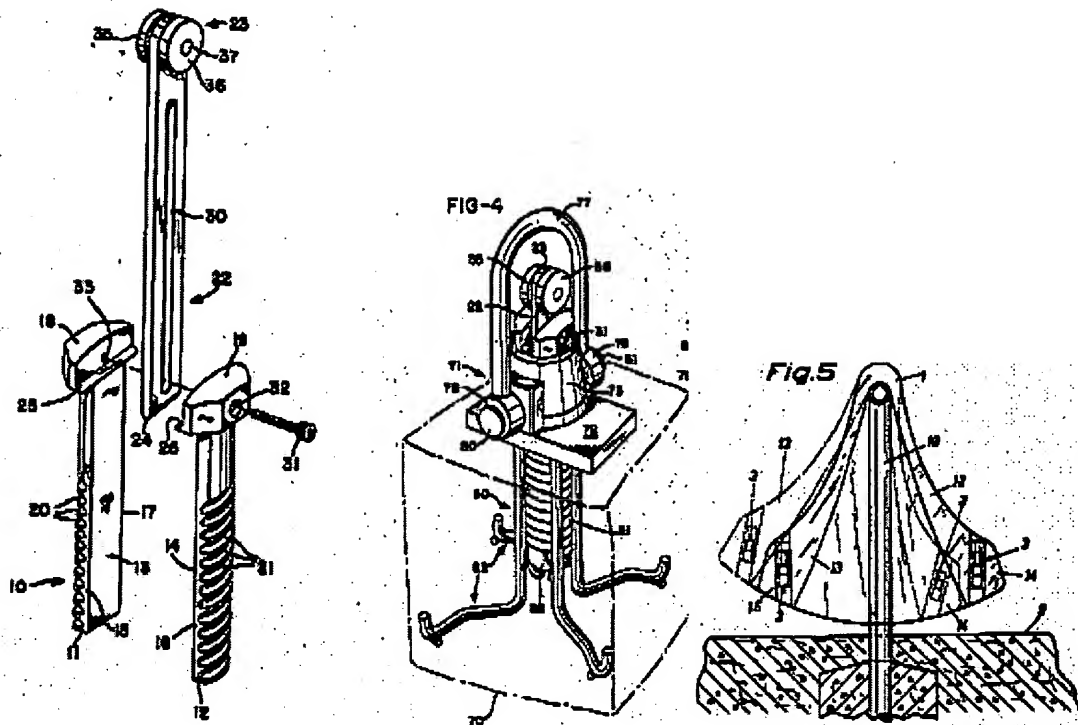
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 3,922,946 Grayson in view of US Patent No. 4,190,380 Almer et al.

With respect to claim 1, Grayson discloses an apparatus for coupling (Figs. 1, 5) comprising a first generally planar member (22) having a pair of generally opposed surfaces and an oblong slot (30) therebetween disposed at an engaging region; a coupling member (10) having an external thread set (20, 21) and having a non-spherical elongated portion (31) for engaging the oblong slot (30) of the planar member (22), and the planar member (22) and coupling member (10) are locked in position relative to each other when the portion (31) is inserted into the oblong slot (30) of the planar member (22); and a second member (constituted by concrete block 70) having an internal thread set adapted to engage the external thread set (20, 21) of the coupling member thereby connecting the second member (70) to the first planar member (22), wherein portions of the pair of generally opposed surfaces of the planar member (22) extend into the thread set of the second member (70). Grayson does not disclose that the second member is non-planar member. Almer et al. teach (Fig. 5) that concrete block can be formed in the shape of a non-planar block. The blocks of Almer et al. are for roadway barriers. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the concrete block of Grayson shaped as non-planar block as taught by Almer et al. in order to provide a lift attachment to barrier blocks with a lift attachment embedded therein that is also readily removable.



With respect to claim 3, Grayson discloses (Figs. 1-3) that the aperture (54) is formed in a region adjacent an edge portion of the first planar member.

With respect to claim 4, Grayson discloses the claimed invention except for the planar member having more than one slot. However, the duplication of components has been consistently held to involve only routine skill in the art. *St. Regis Paper Co. V. Bemis Co.*, 193 USPQ 8. Accordingly, it would have been no more than an obvious duplication of parts to one of ordinary skill in the art to provide Grayson with more than one slot so as to enable adjustable assembly and provide for duplicative effect.

With respect to claim 6, Grayson discloses (Figs. 1, 4) that the coupling member (10) has a larger diameter dimension than a thickness dimension of the first planar member.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10, 11, 13, 14, and 25-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Grayson.

With respect to claim 10, Grayson discloses an apparatus for connecting two members together (Figs. 1, 4) comprising a first member (22) having a pair of centrally opposed major surfaces and defining an engaging region, and an oblong slot (30) disposed at said engaging region, the oblong slot (30) defining a pair of generally planar walls; an elongate threaded coupling member (10) having an external thread set and an engaging portion (31) for engaging the oblong slot (30) of the first member (22), said threaded coupling member (10) removably engaging the oblong slot (30); and the coupling member (10) having a pair of generally parallel planar walls engaging the walls of the first member when the engaging portion is inserted into the first member (22), a contact between the walls of the first member (22) and walls of the coupling member (22) preventing rotation of the first member relative to the coupling member (10); and a second member (70) having an internal thread set sized to cooperate with the external thread set (20, 21) of the threaded coupling member (10), wherein said external thread set (20, 21) of the threaded coupling member is threadedly received within the internal thread set, wherein portions of the first member extend into the internal thread set of the second member. Grayson does not disclose that the slot has an oblong shape. Oblong shaped slots are known to provide adjustability to enable accommodation of tolerances when aligning holes on adjacent members. Therefore, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the slot of Grayson as an oblong shape in order to enable quick assembly and accommodation of manufacturing tolerances.

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With respect to claim 11, Grayson discloses (Figs. 1, 4) that the elongate threaded coupling member (4) is two longitudinal portions of a threaded shank each having a threaded exterior surface and a substantially flat interior surface.

With respect to claim 13, Grayson discloses (Figs. 1, 4) wherein the thickness of the first member is less than a diameter of the internal thread set.

With respect to claims 14 and 27, Grayson discloses an apparatus for joining two members via a threaded coupling member (Figs. 1, 4) the apparatus comprising a first member (22) having an oblong slot or non circular aperture (30) disposed proximate an edge; an elongate threaded coupling member (10) having an external thread set (20, 21) and a non-spherical engaging portion (31) corresponding to the oblong slot (30) of the first member which slot (30) inherently preventing rotation of the first member (22) relative to the coupling member (10) when the portion of the coupling member is inserted into the slot (30), and a second member (70) having an internal thread set sized to cooperate with the external thread set of the threaded coupling member, said internal thread set operatively receiving a portion of both the external thread set of the threaded coupling member (20, 21) and a portion of the first member (22) to secularly bind the first member (22) to the second member (70).

With respect to claim 25, Grayson discloses (Figs. 1, 4) that the elongate threaded coupling member (10) is two longitudinal portions of a threaded shank (20, 21) each having a threaded exterior surface and a substantially flat interior surface.

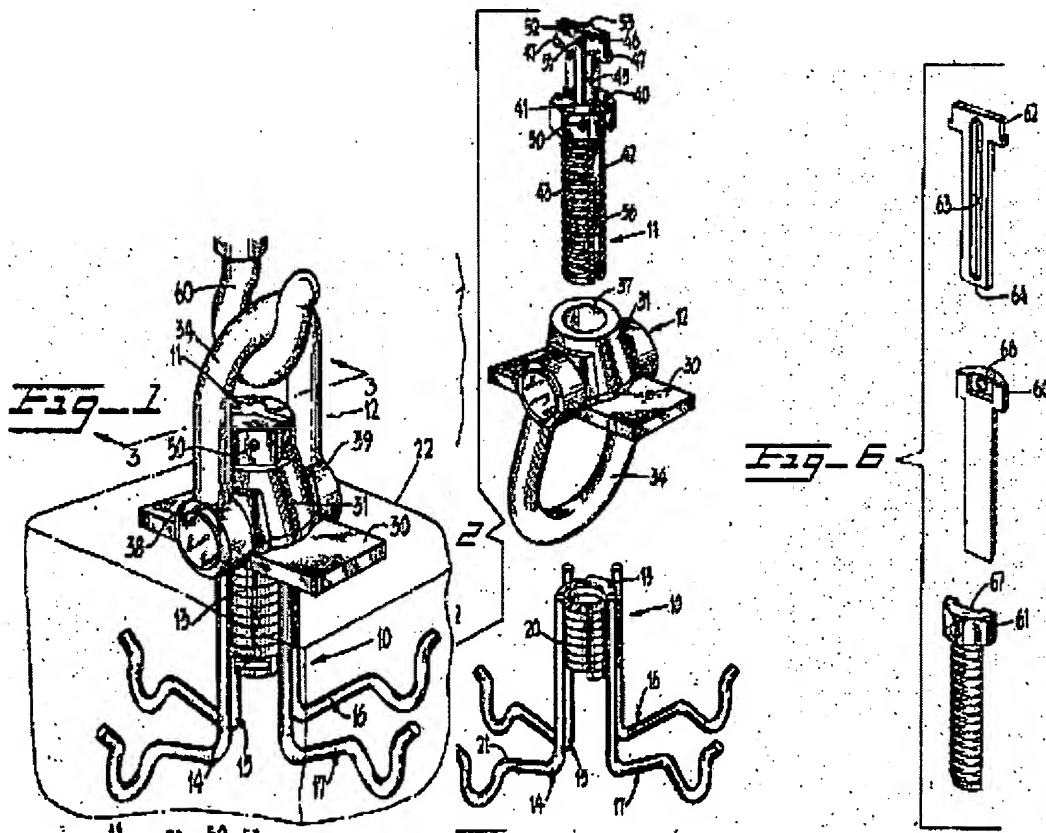
With respect to claims 26 and 28, Grayson discloses (Figs. 1, 4) that the thickness of the first member (22) is less than a diameter of the internal thread set (20, 21); and wherein the non-circular aperture is a slot aperture (30) having a pair of generally planar walls

Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 3,456,547 Strong.

With respect to claim 27, Strong discloses an apparatus for joining two members via a threaded coupling member (Figs. 1, 2, 6) the apparatus comprising a first member (45) having a non circular aperture (63) disposed proximate an edge; an elongate threaded coupling member

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(11) having an external thread set (42, 43) and a non-spherical engaging portion (65), the engaging portion (65) preventing rotation of the first member (45) relative to the coupling member (11) when the engaging portion (65) is inserted into the aperture (63) of the first member (45), and a second member (20) having an internal thread set sized to cooperate with the external thread set of the threaded coupling member (11), said internal thread set operatively receiving a portion of both the external thread set of the threaded coupling member (20, 21) and a portion of the first member (45) to secularly bind the first member (45) to the second member (20).



With respect to claims 28-31, Strong discloses (Figs. 1, 4) that the non-circular aperture is a slot aperture (63) having a pair of generally planar walls; wherein the engaging portion (65) includes a pair of generally parallel planar surfaces being in contact with the pair of planar walls of the slot aperture (63) when the engaging portion is inserted into the aperture; wherein the coupling member (65) is T-shaped; and wherein the coupling member (11) includes a pair of co-

planar surfaces the surfaces being in contact with and generally coplanar to a top planar surface of the first member (45).

Response to Arguments

Applicant's arguments with respect to claims 1, 3, 4, 6, 10,11, 13, 14, 25, and 26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art of record US Patent No. 4,478,546 Mercer is cited to show a quick insertion and release bolt system having a split coupling member to connect a planar member to a second member.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nahid Amiri
Examiner
Art Unit 3679
November 20, 2006



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TECHNOLOGY CENTER 3600